

CLAIMS

1. A method for producing human *lactoferrin* by using an insect cell comprising the steps of:

(a) combining a transfer vector 1 with a recombinant plasmid phLf-8 2 to produce a recombinant expression vector pBacLf 3 modified to permit the regulation of a *lactoferrin* gene by a polyhedrin promoter in a vector pBacPAK;

(b) cotransfecting said recombinant expression vector together with a help vector pBacPAK6 4 into an insect cell Sf9 5 in a culture medium to produce a recombinant insect cell Sf-Lf 6, and producing a recombinant insect virus from said recombinant insect cell; and

(c) producing human *lactoferrin* from said recombinant insect cell Sf-Lf 6.

2. The method of claim 1, wherein said producing a recombinant insect virus step further comprises the step of performing a centrifugal separation of the culture medium containing the recombinant insect cell cultured in the producing step (b) to obtain a progeny virus from the insect cell contained in the upper layer.

3. A human *lactoferrin* produced by a method comprising the steps of:

(a) combining a transfer vector 1 with a recombinant plasmid phLf-8 2 to produce a recombinant expression vector pBacLf 3 modified to permit the regulation of a *lactoferrin* gene by a polyhedrin promoter in a vector pBacPAK;

(b) cotransfecting said recombinant expression vector together with a help vector pBacPAK6 4 into an insect cell Sf9 5 in a culture medium to produce a recombinant insect cell Sf-Lf 6, and producing a recombinant insect virus from said recombinant insect cell; and

(c) producing human *lactoferrin* from said recombinant insect cell Sf-Lf.

4. A recombinant insect virus produced by a method comprising the steps of:

(a) combining a transfer vector 1 with a recombinant plasmid phLf-8 2 to produce a recombinant expression vector pBacLf 3 modified to permit the regulation of a *lactoferrin* gene by a polyhedrin promoter in a vector pBacPAK;

(b) cotransfecting said recombinant expression vector together with a help vector pBacPAK6 4 into an insect cell Sf9 5 in a culture medium to produce and culture a recombinant insect cell Sf-Lf 6; and

(c) producing a recombinant insect virus from said recombinant insect cell Sf-Lf.

5. A biological verification method for a recombinant human *lactoferrin*, comprising the steps of:

mixing human *lactoferrin* produced by the method of claim 1 with a pathogenic microorganism; and,

measuring anti-bacterial activity of said mixture against the pathogenic microorganism.

6. The method of claim 5, wherein said pathogenic microorganism is selected from the group consisting of *Pseudomonas cepacia*, *Pseudomonas putida*, *Salmonella typhimurium*, *Pseudomonas fluorescence* and *E. coli*.